

Figure 1

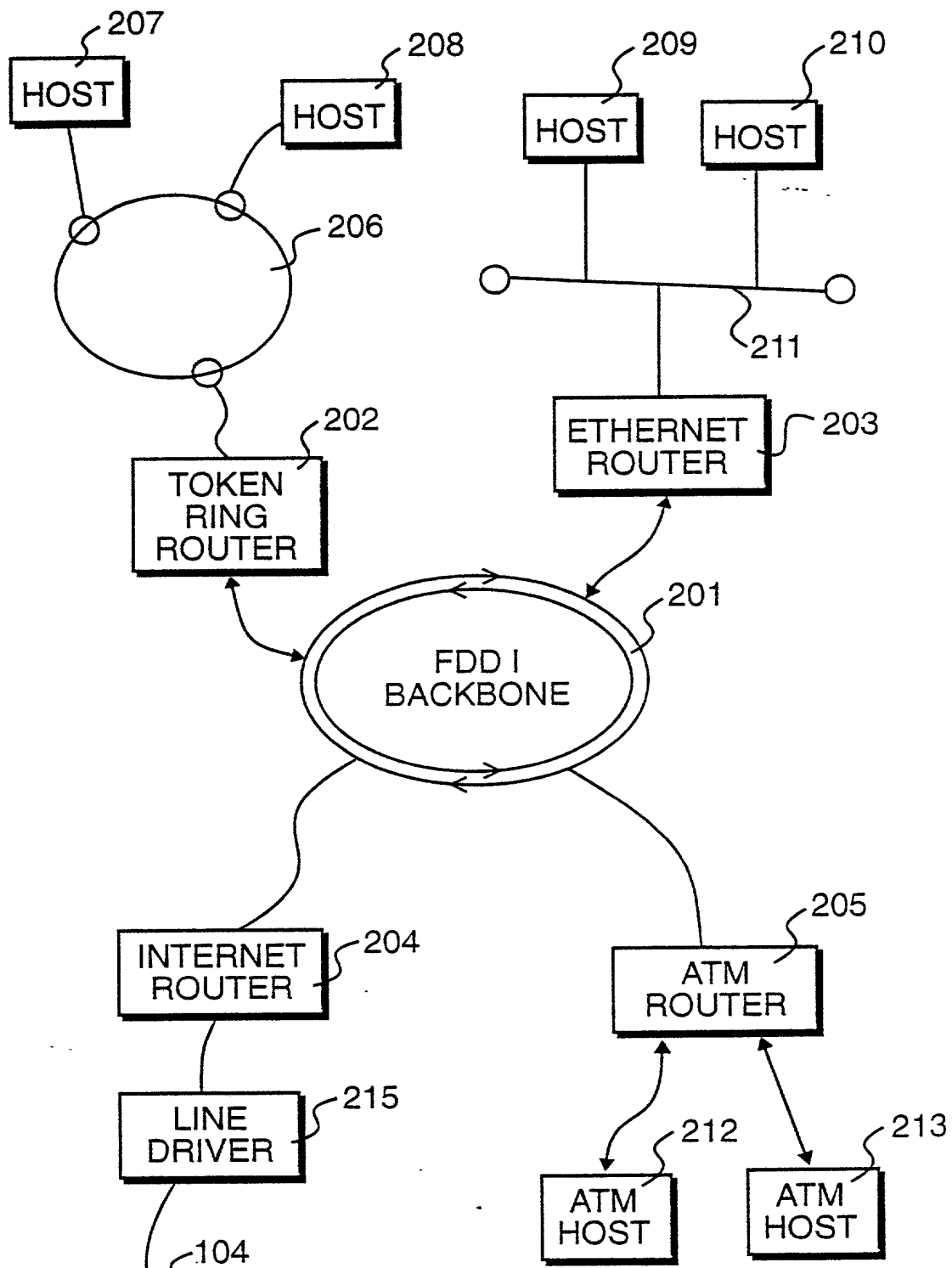


Figure 2

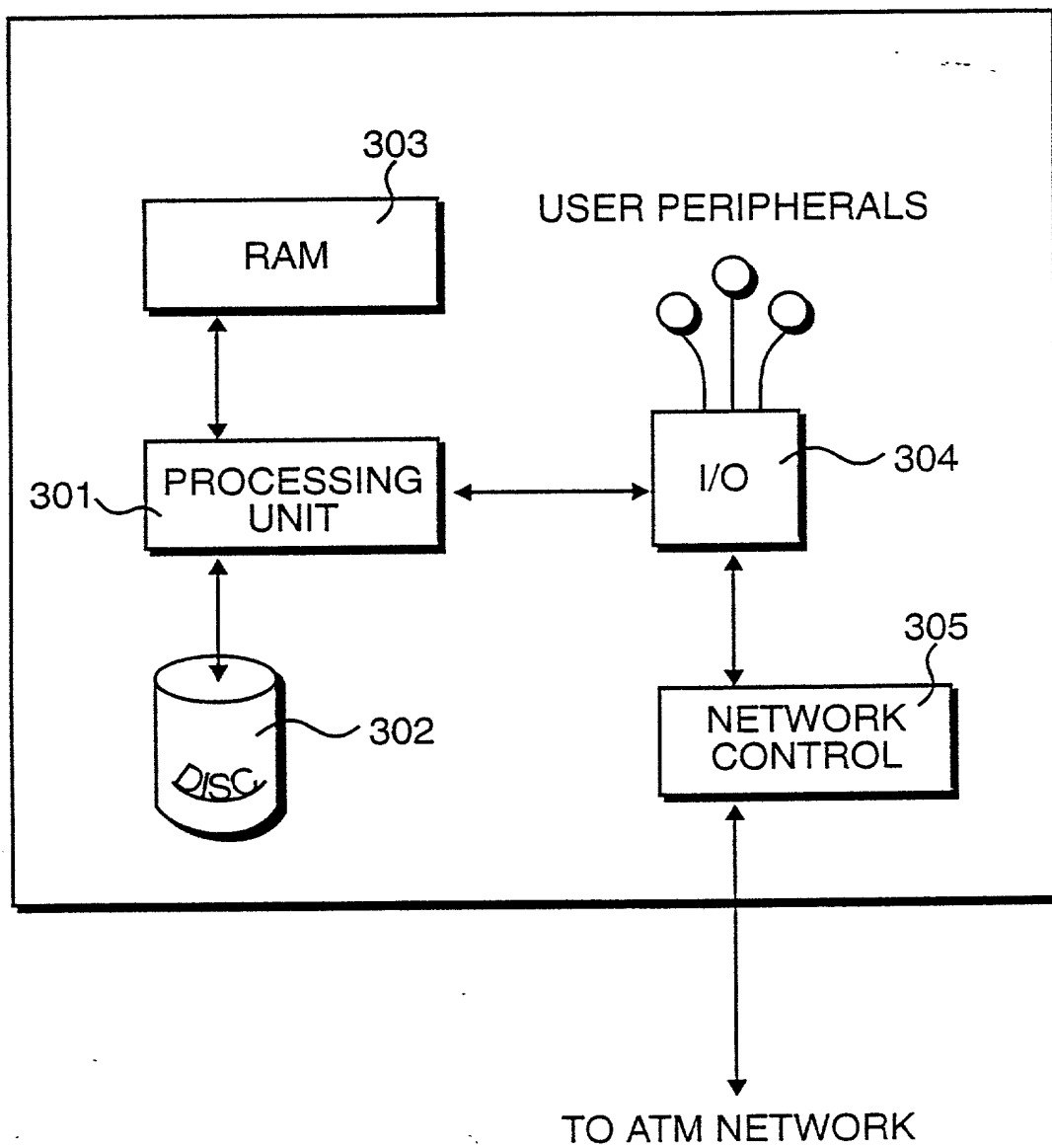


Figure 3

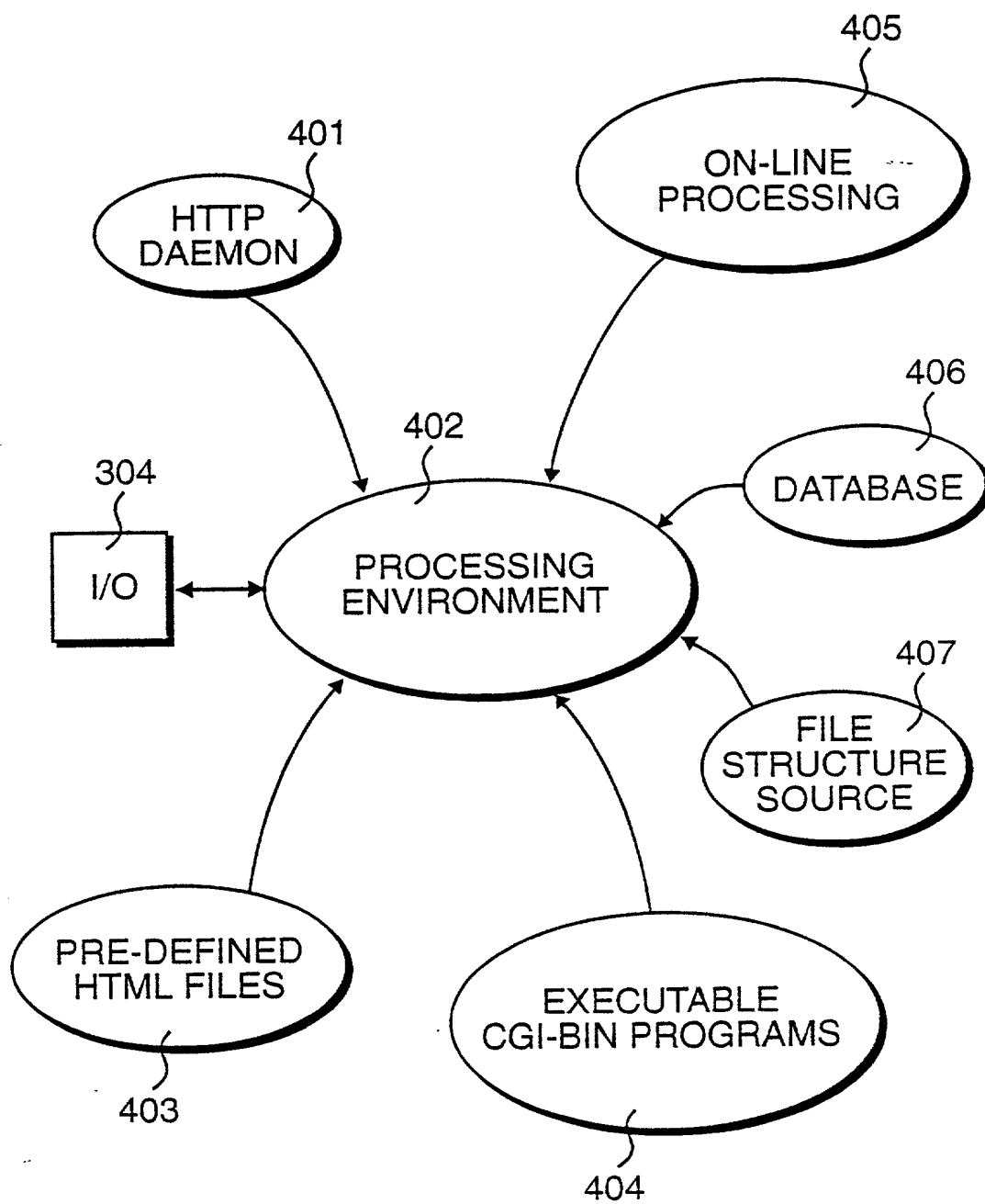


Figure 4

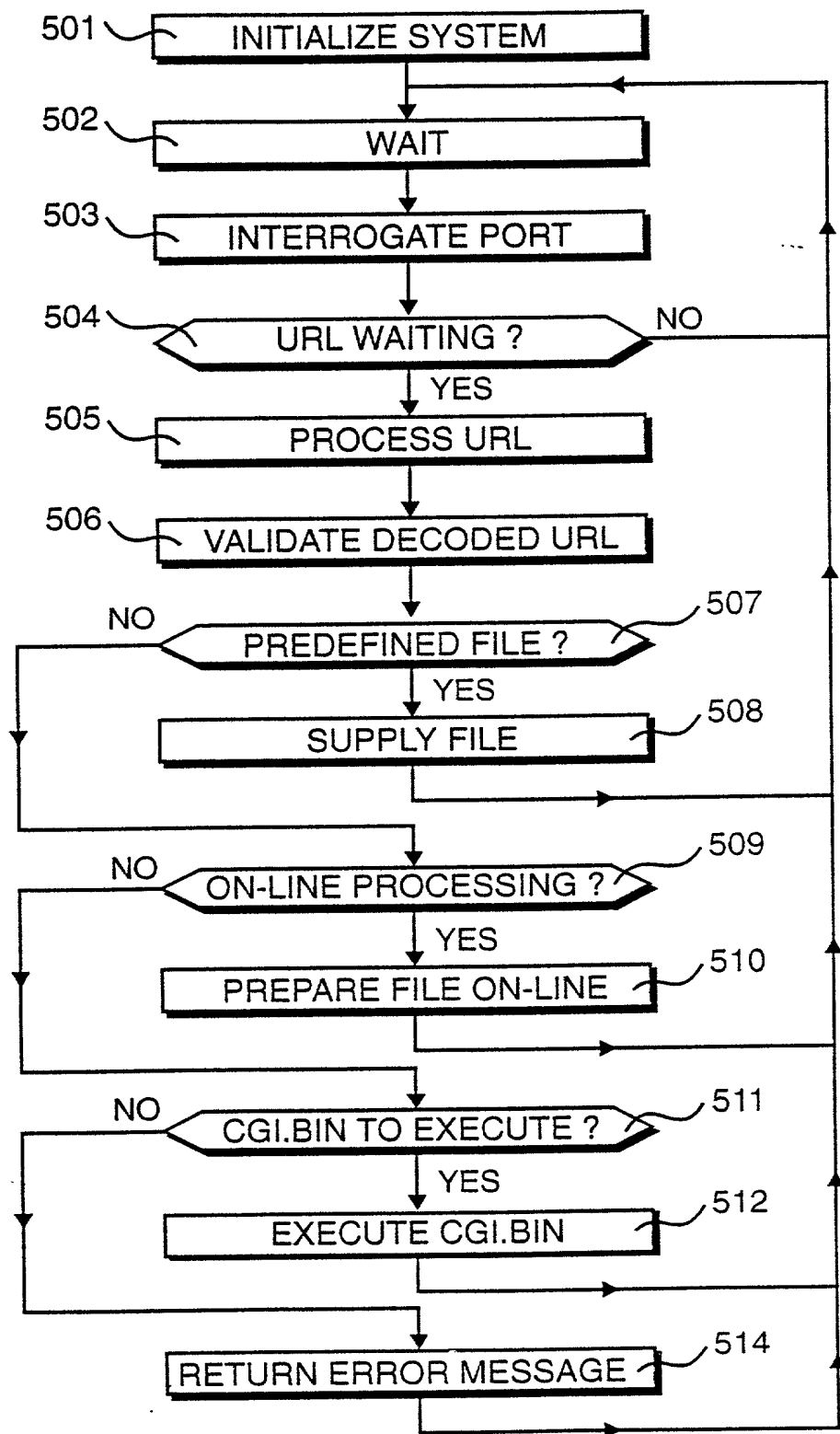


Figure 5

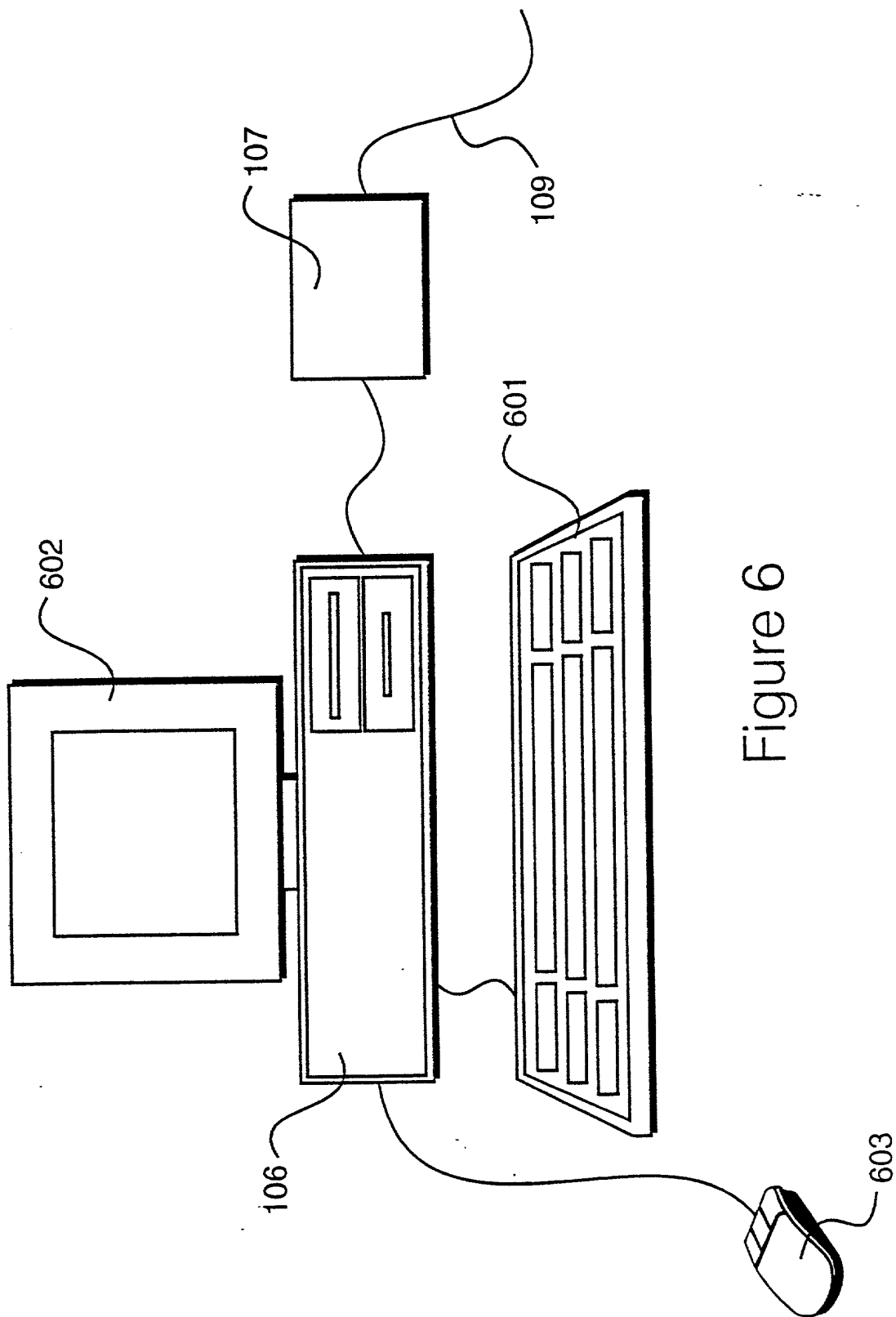


Figure 6

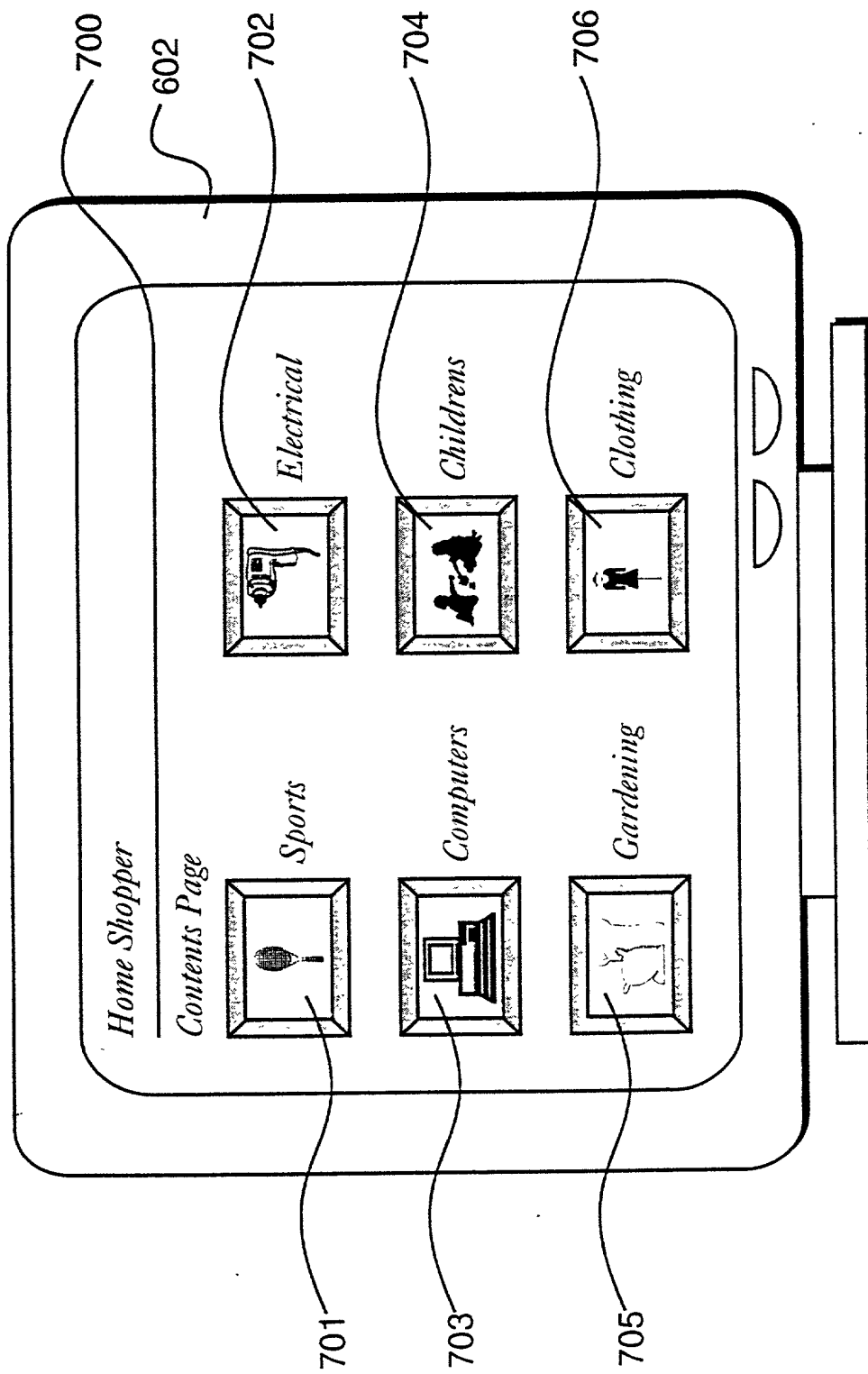


Figure 7

ASCII transmission to a browser

```
1 <HEAD><TITLE>Home Shopper</TITLE></HEAD>
2 <BODY>
3 <hr size=1>
4 <H1>Contents Page</H1>
5 <A HREF="http://localhost:8081/vdl/123456/1000/123/999">
6 Sports</A>
7 <A HREF="http://localhost:8081/vdl/123456/1001/123/999">
8 Electrical</A>
9 <p>
10 <A HREF="http://localhost:8081/vdl/123456/1002/123/999">
11 Computers</A>
12 <A HREF="http://localhost:8081/vdl/123456/1003/123/999">
13 Childrens</A>
14 <p>
15 <A HREF="http://localhost:8081/vdl/123456/1004/123/999">
16 Gardening</A>
17 <A HREF="http://localhost:8081/vdl/123456/1005/123/999">
18 Clothing</A>
19 <hr size=1>
20 <p>
21 </BODY>
```

Figure 8

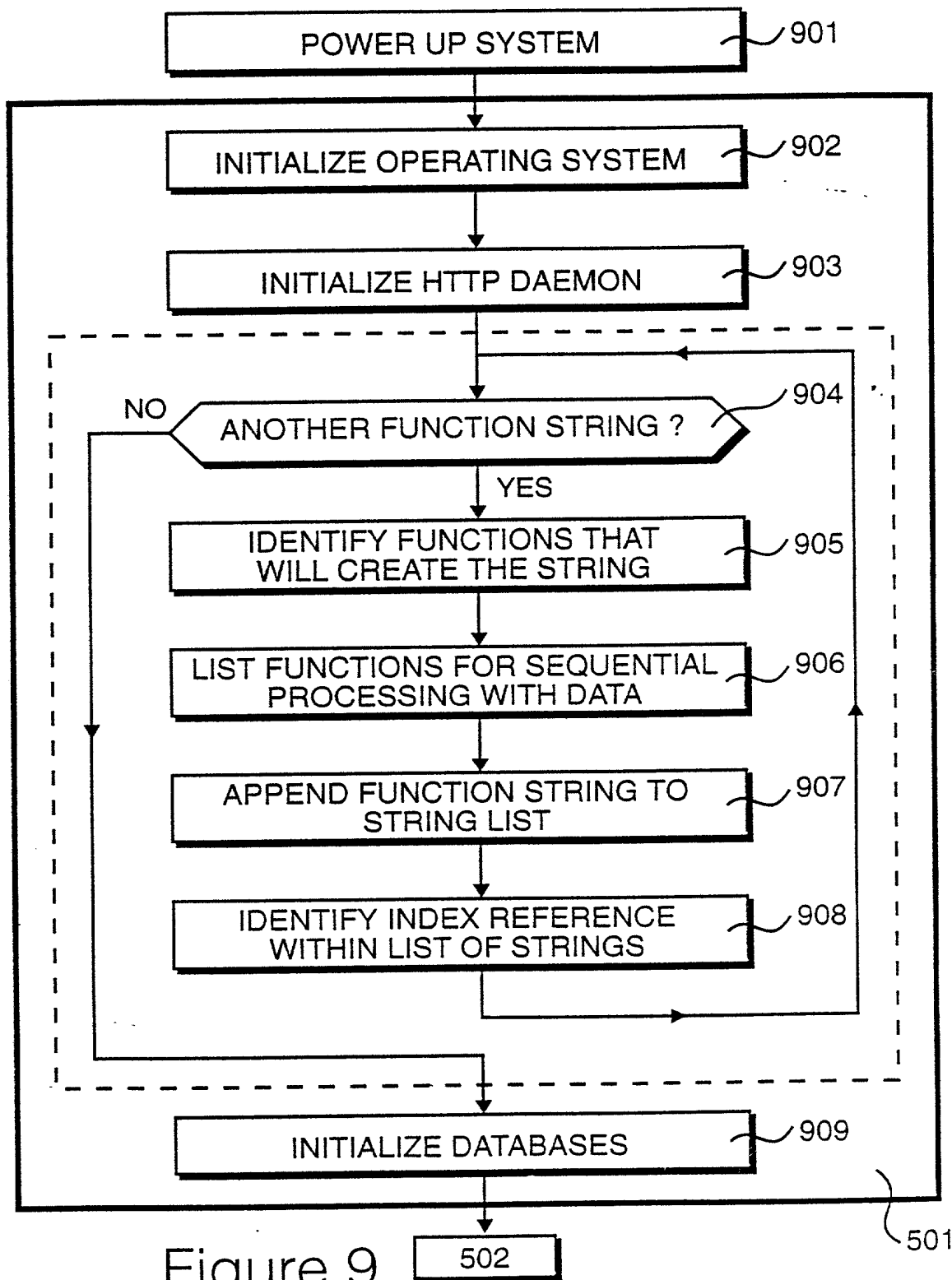


Figure 9

```

graph TD
    510[510] --> 1001[BUFFER INCOMING URL]
    1001 --> 1002{CHECKSUM VALID ?}
    1002 -- YES --> 1003{USER ID VALID ?}
    1002 -- NO --> 1009[RETURN ERROR MESSAGE]
    1003 -- YES --> 1004{DATA IDENTIFIER VALID ?}
    1003 -- NO --> 1009
    1004 -- YES --> 1005{FORMAT IDENTIFIER VALID ?}
    1004 -- NO --> 1009
    1005 -- YES --> 1006[GENERATE HTML PAGES]
    1005 -- NO --> 1009
    1006 --> 1007[SUPPLY PAGES TO NETWORK]
    1007 --> 1008[UPDATE USER LOG]
    1008 --> 1009
    1008 --> 1000[USER DATABASE]
    1000 --> 1003
    1009 --> 502[502]
    style 1000 fill:none,stroke:none

```

Figure 10

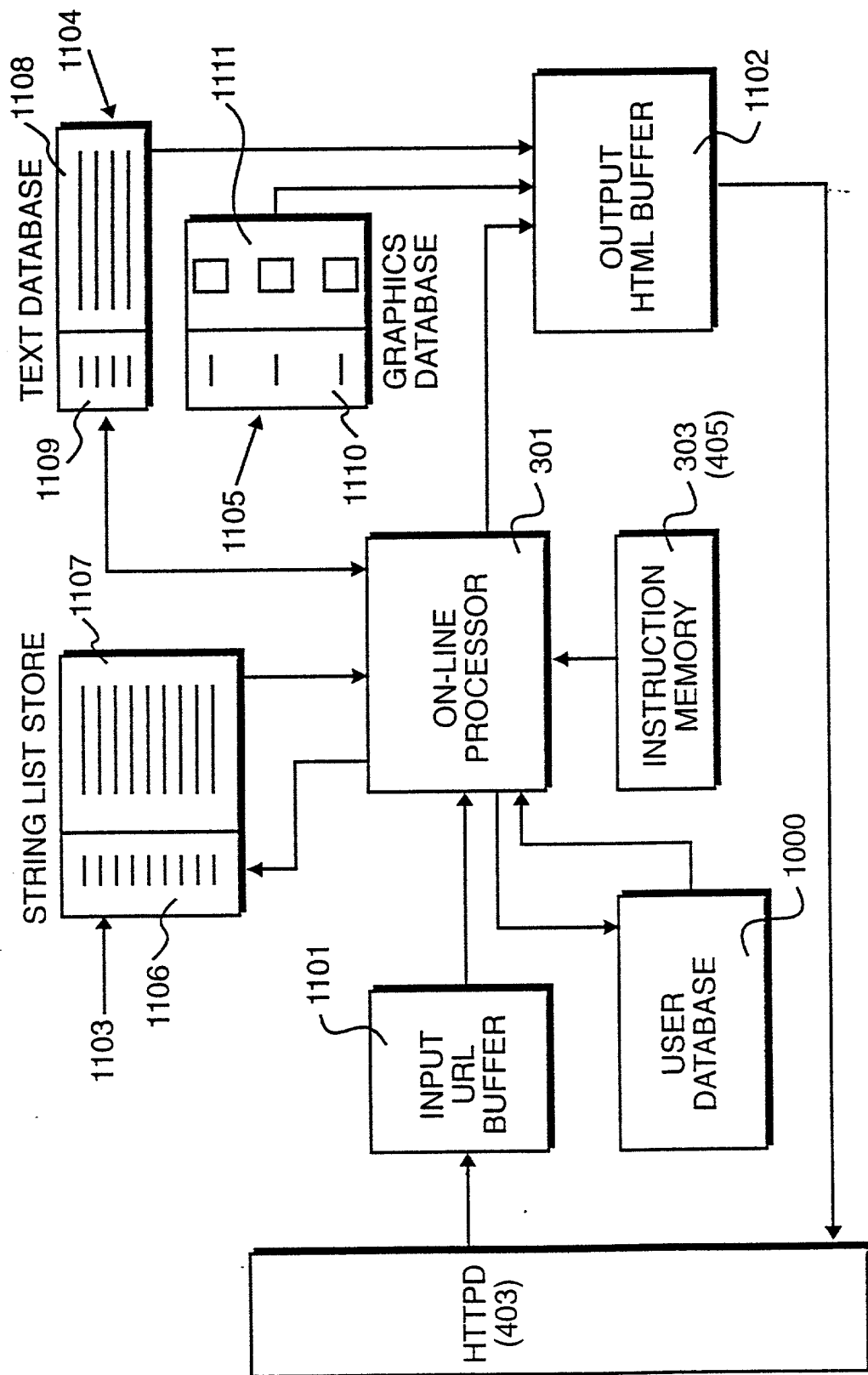


Figure 11

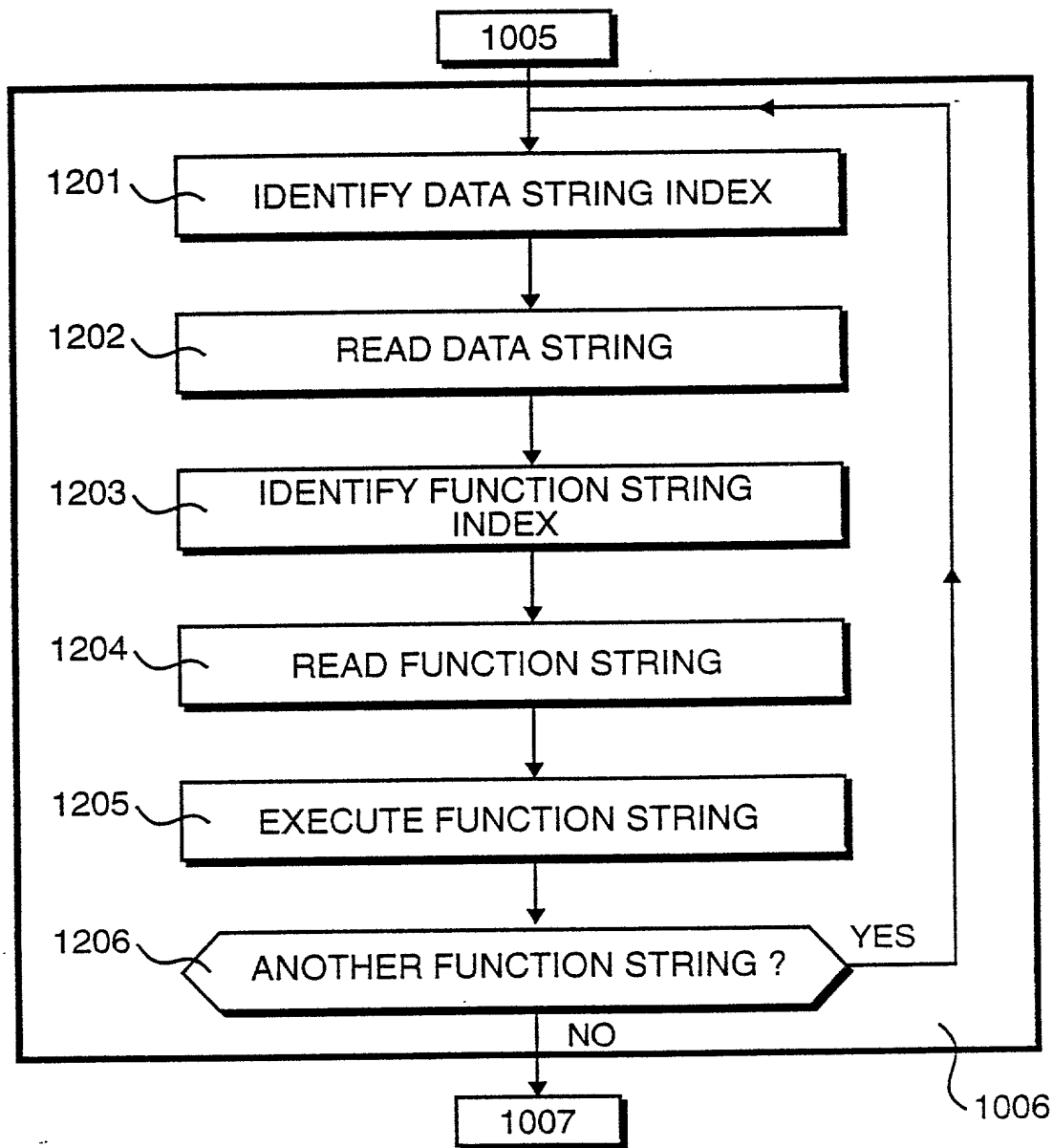


Figure 12

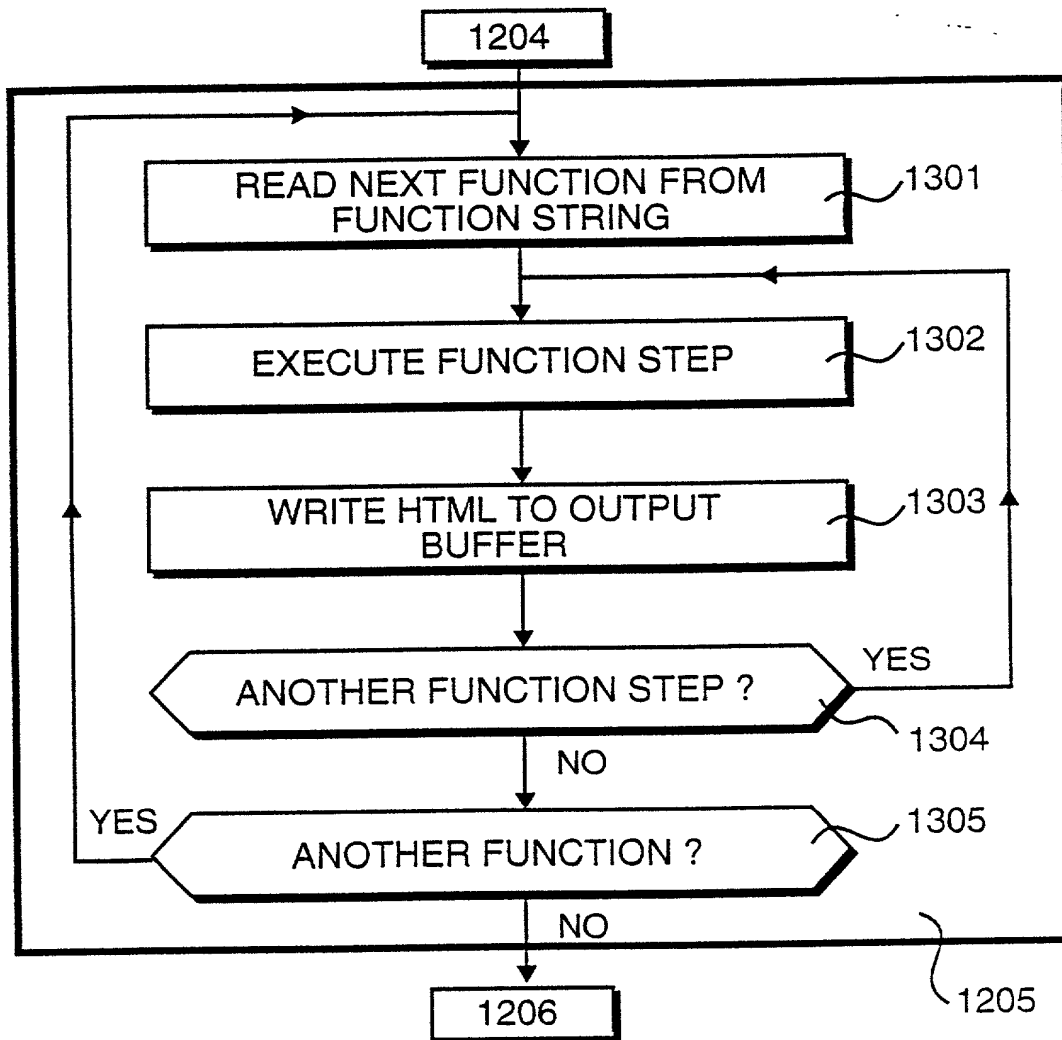


Figure 13

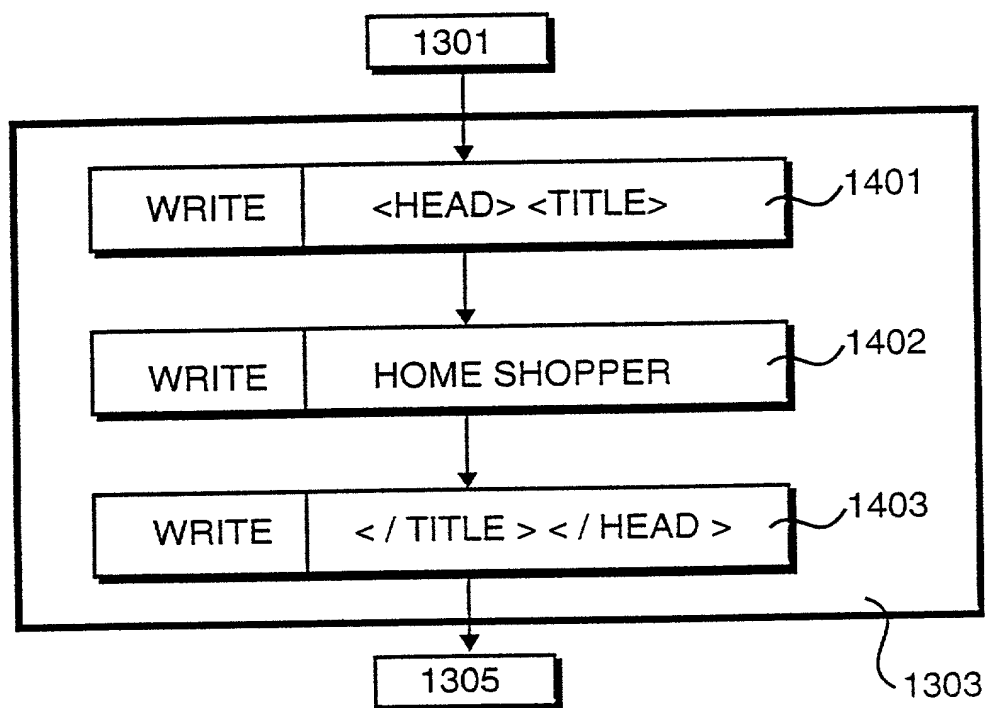


Figure 14